



Ciona intestinalis

Solitary Tunicate

Threat Scores

1. Ecological Impact
 - Negative effects on aquaculture and native species; destruction of habitat; fouling
2. Invasive potential
 - A fouling organism requiring assisted transport to expand alien range
3. Geographic extent
 - Found in a variety of ecoregions all over the world.
 - Regionally patchy
4. Management difficulty
 - Antifoulants (TBT and novel modern coatings) and copper compounds



Geography and Habitat

1. Native: Arctic to Rhode Island
2. Introduced: Pacific Coast from Alaska to California
3. Habitat
 - Marine

Invasion Pathways

1. Stocking in open water
2. Hull/Surface fouling
3. Other animal trade
 - Introduced after being discarded from scientific research

Non-Native Locations

1. 54- Gulf of Alaska
2. 55- N. American Pacific Fjordland
3. 56- Puget Trough/Georgia Basin
4. 57- OR, WA, Vancouver
5. 58- Northern California
6. 59- Southern California Bight

Sources

1. Molnar, Jennifer et al. 2008. Assessing the global threat of invasive species to marine biodiversity. *Frontiers in Ecology and the Environment*. Vol. 6, No. 9, pp. 485-492.
2. <http://conserveonline.org/workspaces/global.invasive.assessment>
3. http://www.marlin.ac.uk/imgs/o_cioint3.jpg